

BOOK II

HARMONY SIMPLIFIED

By

RALPH L. BALDWIN

Director of School Music,
Hartford, Conn.

AND

ARTHUR F. A. WITTE

Director of School Music,
Yonkers, N. Y.

in two parts:

BOOK I

To Secondary Triads

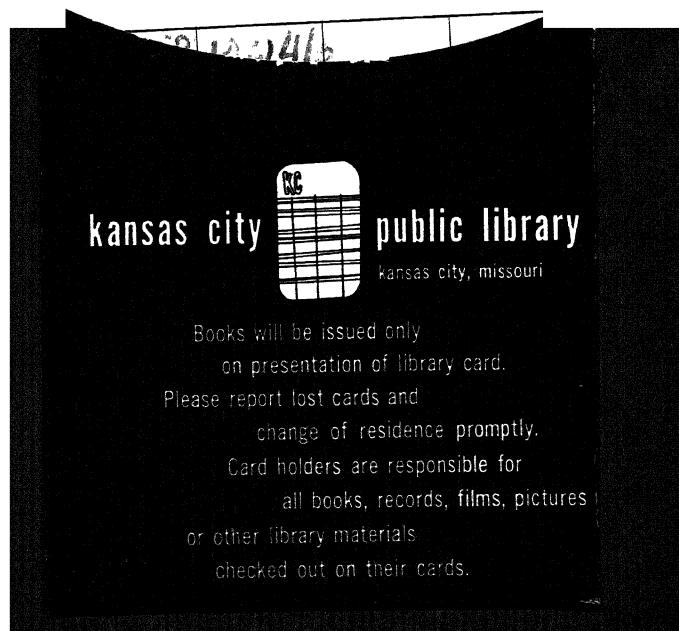
BOOK II

**From the Dominant Ninth Chord
to the Neapolitan Sixth Chord**

M. WITMARK & SONS - NEW YORK

781.3 B18h v.2 59-01397
Baldwin
Harmony simplified

781.3 B18h v.2 59-01397
Baldwin
Harmony simplified





10002 4536738

BOOK II

HARMONY SIMPLIFIED

DATE DUE

—NEW YORK

L-16

Foreword

The course in harmony presented in this book is designed to satisfy an urgent need by placing in the hands of teachers and students a practical and concise treatise on the science of harmony. It has been the aim of the authors to eliminate all unnecessary details, yet at the same time to cover all essential points for a practical understanding of the subject. As preparation for this course the student should have a good foundation in elementary theory.

It is the contention of the authors that the ability to recognize chords through hearing and the development of the power to play chord progressions on the piano is of more practical value to the student than the methodical harmonization of a melody on paper. The three phases of harmony, that is, ear training, keyboard practice and harmonization of melodies should be developed simultaneously.

The subject matter of each lesson should be taught by the teacher before the student makes reference to the subject matter in the book. The student should be led to formulate each rule by deduction from instances furnished by the teacher.

THE AUTHORS

BOOK II

Chapter XI

THE DOMINANT NINTH CHORD

The five tone chord erected upon V as the root is called the DOMINANT NINTH CHORD and is noted V⁹.

Ex. 51



The notes comprising it are 5, 7, 2, 4 and 6.

Hence the melody notes of the scale may be harmonized as follows:

1	2	3	4	5	6	7
I	V	I	IV	I	IV	V
IV	V ⁷	III	II	V	VI	V ⁷
VI	II	VI	V ⁷	V ⁷	II	III
	V ⁹		V ⁹	III	V ⁹	V ⁹

As it is a five note chord, one of the notes must be omitted when writing for four voices. The FIFTH of the chord, 2, is usually omitted, rarely the third of the chord, 7.

The V⁹ should NOT be inverted.

The ninth of the V⁹, 6, should be written at least a ninth above the root, 5, never a second above.

The V⁹ may progress to any position of the V⁷ or vice versa.

The V⁹ resolves to the I, the ninth, 6, resolving either downward to 5 or upward to 1.

Ex. 52



Formulas:

Ex. 53



Melody 8 - 7 - 6 - 5

Bass 1 - 2 - 5 - 1

Chords I - V₂ - V⁹ - I

In major or minor

Ex. 54



Upper voices 6 - 5 - 4 - 3 } Inter-
4 - 3 - 2 - 1 } change-
7 - 7 - 7 - 1 } able

Bass 5 - 5 - 5 - 1

Chords V⁹ - III₁ - V⁷ - I

Ex. 55

3 2 1 #4 4 3

G V⁹ V⁷ I g V⁹ V⁷ I

Upper voices 3 - 2 - 1
#4 - 4 - 3
1 - 7 - 1

Bass 2 - 5 - 1
Chords V⁹ - V⁷ - I
(Dom) (Tonic)

The V⁹ may also be used as a chord of modulation as follows:

Ex. 56

5 6 5 4 6 2 1 3 5 2 6 3 2 1

G I A IV V⁷ I
A V⁹ I E V⁹ F I G V⁷ F III₁ V⁷ I
D V⁷ C V⁹

Exercises

(V⁹)

① MAJOR

②

③

④

⑤

⑥ MINOR

⑦

⑧

⑨

⑩

Chapter XII

KEY AND CHORD RELATIONSHIP

A key is CLOSELY RELATED to any other key having one sharp or flat more or less.

ALL other keys are REMOTELY RELATED to the original key.

The progression through all the keys successively via the SUBDOMINANT route, that is, counter clockwise, is possible as follows:

Ex. 57

By omitting the chord of resolution after each V^7 chord, the following progressions are possible: (Exs. 58, 59, 60.)

Two voices sing root of chord only;
two voices sing chromatic scale downward.

Ex. 58

One voice sings roots;
one voice sings fifths and roots alternately;
two voices sing chromatic scale downward.

Ex. 59

Two voices sing root and 5th or 5th and root alternately;
two voices sing chromatic scale downward.

Ex. 60

12. 50 4 7 4 7 4 7 4

In examples 57, 58, 59, and 60 the notes in the V⁷ of the key of C flat are enharmonically changed to the notes of the key of B.

Hence it will be observed that there are three processes involved in examples 58, 59 and 60 as follows:

1. Roots of the chord only. One voice or two voices may sing the chord-roots in succession, in which case the progression will move up a perfect 4th or down a perfect 5th. When two voices sing chord-roots they must move in contrary motion.

2. Two voices must move downward by half step progressions. The voice starting on 7 of the key in the first V^7 chord moves downward a CHROMATIC half step to 4 in the key of the next V^7 chord. The voice starting on 4 of the key in the first V^7 moves downward a DIATONIC half step to 7 in the key of the next V^7 chord.

3. Voices starting on 5 or 2 of the key in the first V^7 may move as follows:

- a. The voice starting on 5 in the first V^7 repeats and becomes 2 in the next V^7 chord.
- b. The voice starting on 2 in the first V^7 moves downward a DIATONIC whole step and becomes 5 in the next V^7 chord.

The progression thru all the keys successively via the DOMINANT route, that is, clockwise, is possible as follows:

Ex. 61

1 4 2 4 1 4 3
etc.

1 4 2 4 1 4 3
etc.

C I G IV V⁷ D IV V⁷ I

A progression of V^7 chords in succession, omitting the chord of resolution after each V^7 , is impossible thru the dominant keys. Why?

CHORD RELATIONSHIP:

Ex. 62-a

Ex. 62-b

Ex. 62-c

Ex. 62-d

Ex. 62-a. Any major triad may be found in three different major keys and in two different minor keys, as a I, a IV or a V in the former and as a V or a VI in the latter.

Ex. 62-b. Any minor triad may be found in three different major keys and in two different minor keys, as a II, a III or a VI in the former and as a I or a IV in the latter.

Ex. 62-c. Any diminished triad may be found in one major key as a VII or in two different minor keys as a II or a VII.

Ex. 62-d. An augmented triad must be the III of one minor key only.

Exercises

Chapter XIII

MODULATION TO REMOTE KEYS

The general rules in Chapter IX are effective also in modulation to remote keys.

Ex. 63

Ex. 63 consists of two parts, a) and b). Part a) shows four examples of blind modulation. The first example starts in G major (C 5 6 5 3) and modulates to C major (G 3 4 5 3). The second example starts in C major (C 7 1 2 1) and modulates to C major (g 3 2 1 5). The third example starts in C major (C 2 1 5 1) and modulates to A major (A 6 2 2 1). The fourth example starts in A major (f# 3 1 7 1) and modulates to A major (A 6 2 2 1). Part b) shows two examples of apparent modulation. The first example starts in D major (D 5 1 7) and modulates to G major (G 7 2 1). The second example starts in G major (G 7 2 1) and modulates to D major (d 3 1 4 3).

Ex. 63 - a. Four examples of BLIND modulation. In each of these examples a modulation occurs but no chromatic sign occurs in the melody indicative of a modulation.

Ex. 63 - b. Two examples of APPARENT modulation. In each of these examples a clue is given of the new tonality by the chromatic sign.

Hence: Blind modulation occurs when no chromatic sign indicative of a modulation appears in the melody.

Apparent modulation occurs when a chromatic sign indicative of a modulation occurs in the melody.

Ex. 64

Ex. 64 shows a musical example with a bass line and a harmonic analysis below. The bass line consists of eighth-note chords. The harmonic analysis indicates modulations between Bb major (I), C major (V7/3), D major (V2/1), Bb major (II), G major (V7/I), and I2 major (V7/I). The analysis uses Roman numerals and Roman numerals with a 7 above them to indicate the function of the V7 chords.

In Ex. 64 REMOTE modulations are made by means of the V^7 in the new tonality. Notice that the chord of resolution in each key falls upon the accent.

Hence a modulation may be made to any key provided no cross relation occurs between the last chord of one key and the first chord in the following key.

Exercises

Exercises 1, 2, and 3 are musical exercises in G major (4/4 time). Exercise 1 consists of a single melodic line. Exercise 2 consists of a melodic line with a harmonic bass line. Exercise 3 consists of a melodic line with a harmonic bass line.

4

5

6

7

8

9

10

11

12

13

14

15

16

Chapter XIV

THE DIMINISHED SEVENTH CHORD

A chord of the seventh erected on 7 of a minor key, comprises four notes, each a minor third above the other, known as the DIMINISHED SEVENTH CHORD. It is marked D⁷.

Ex. 65



It may be constructed either upward or downward from any note.

RESOLUTION TO A MAJOR OR MINOR TRIAD or such triads inverted.

A D⁷ may be constructed on the note a diatonic half step below the root of any major or minor triad, resolving to this triad.

Ex. 66



Ex. 67

REGULAR RESOLUTIONS

IRREGULAR RESOLUTIONS



Ex. 68

IRREGULAR RESOLUTIONS



For the convenience of the student a chart is given following each method of resolution.

CHART: For determining chord choices.

In the first column is indicated the nature of the progression from one note in the D⁷ chord to its resolving note in the second chord.

In the second and third columns is indicated the kind of chord of resolution (i. e. the second chord), the first chord being always a D⁷.

The Arabic numbers in the second and third columns refer to the root (marked 1), third (marked 3), or fifth (marked 5) of the resolving chord.

Ex. 69

a)  b)  c) 

		Major triad	Minor triad
Ex. 69 - a	Diatonic half step downward	3	5
" " - a	" " " "	5	
" " - b	" whole "	1	1
" " - b	" " "		3
" " - c	" half " upward	1	1

Exercises

① 

② 

③ 

④ 

⑤ 

RESOLUTION TO A I_2 in cadences.

A D^7 constructed on the raised second step of a major key, or on the raised fourth step of a minor key may also resolve to a I_2 in that key.

Ex. 70



Ex. 71

a)

b)

c)

CHART:

	Major triad	Minor triad
Ex. 71- a	Diatonic half step upward	3
" " - a	" " " "	5
" " - b	" whole " downward	5
" " - c	Same note repeated	1
" " - c	" " "	3

Since the second inversion of a triad is a weak chord, D^7 should not be resolved to a triad in second inversion except to the I_2 in cadences.

Exercises

Cadences:

RESOLUTION TO A V^7 or its inversions.

A D^7 may be constructed upon the raised sixth step of a major key or on the doubly raised sixth step of a minor key, resolving to the V^7 in that key.

Ex. 72

In major

D^7 V_1^7 D_3^7 V^7

C C

In minor

D^7 V_1^7 D_3^7 V^7

c c

Ex. 73

Ex. 74

a)

C V_2^7 c V_2^7 A V_3^7 a V_3^7 $F\#$ V^7 $f\#$ V^7

b)

F V_1^7 f V_1^7

		V^7 in major	V^7 in minor
Ex. 74 - a	Diatonic half step upward	3	3
" " - a	" " "	5	5
" " - a	" " "	7	7
" " - b	Same note repeated	1	1

Exercises

(1)

(2)

RESOLUTION TO THE III - AUGMENTED TRIAD (in minor keys)

A D^7 may be constructed also on the seventh step in minor resolving to the III in that key.

Ex. 75



Ex. 76

CHART:

Augmented triad

Ex. 76 - a	Diatonic half step downward	3
” ” - b	” whole ” ”	1
” ” - c	” half ” upward	1
” ” - d	Same note repeated	5

THREE TONE DIATONIC PROGRESSION DOWNWARD.

A D^7 may also be used effectively in any three tone diatonic downward progression, the first tone being non-harmonic.

Ex. 77

The three tone progression may occur in one of the lower voices as follows: Refer to chart Ex. 69 for chord choice.

Ex. 78

Since the D⁷ is erected in minor thirds there are but three D⁷ chords differing in sound.

Ex. 79

1 2 3 4

Note that the fourth chord in Ex. 79 sounds the same as the first chord but it is enharmonically changed in its notation.

The D⁷ chord should never progress to a diminished triad.

A D⁷ chord may progress to any other D⁷.

The D⁷ chord is useful as a modulatory chord but should be followed by a V⁷ chord in order to establish its identity in the new key.

Care must be exercised in the notation of the D⁷.

Accidentals written a half step above scale tones tend to resolve UPWARD.

" " " " below " " " " DOWNWARD.

SUMMARIZED CHART for choice of D⁷, with no voice skips in resolution.

	MAJOR TRIAD	MINOR TRIAD	I ₂ IN MAJOR	I ₂ IN MINOR	V ⁷ IN MAJOR	V ⁷ IN MINOR	AUG. TRIAD
Diatonic half step downward	3 5		5				3
" whole "	1	1 3		5	5		1
" half " upward	1	1		3 5	5	3 5 7	3 5 7 1
Same note repeated				1	1 3	1	5

Exercises

①

②

3

4

5

6

7

8

9

10

Chapter XV

SECONDARY SEVENTH CHORDS

A chord of the seventh may be erected upon each note of the major scale.

Ex. 80

I^7 II^7 III^7 IV^7 V^7 VI^7 VII^7

As these chords are discords they may resolve as follows:

1. To the triad on the fourth degree above, or the fifth degree below:

I^7	resolves to the IV
II^7	" " " V
III^7	" " " VI
IV^7	" " " VII (Rare)
VI^7	" " " II
VII^7	" " " III (Rare)

The voices of any seventh chord may progress as follows:

Ex. 81

2. To the chord of the seventh on the fourth degree above or the fifth degree below.

I^7	resolves to the IV^7
II^7	" " " V^7
III^7	" " " VI^7
IV^7	" " " VII^7
VI^7	" " " II^7
VII^7	" " " III^7

Voice progressions:

Ex. 82

3. To the triad on the diatonic step above:

Ex. 83

I^7 II IV^7 V

The following succession of seventh chords is possible.

Ex. 84

VI⁷ II⁷ IV⁷ VII⁷ II⁷ V⁷ VII⁷ I I₁ V⁷ I⁷ III⁷ VI⁷ I⁷ VII⁷ I₁

Exercises

①

②

③

④

⑤

⑥

⑦

⑧

⑨

⑩

Chapter XVI

AUGMENTED SIXTH CHORDS (German, French and Italian Sixth Chords)

The German Sixth Chord (G) has a major third, a perfect fifth, an augmented sixth.
The French Sixth Chord (F) has a major third, an augmented fourth, an augmented sixth.
The Italian Sixth Chord (T) has a major third doubled and an augmented sixth.

A. These chords resolve to a major or minor triad, the root of which is a diatonic half step below the root of the augmented chord.

Ex. 85

Since the augmented chords resolve either to a major or minor triad, four of the series will be found in the minor key and six in the major key, as follows:

Ex. 86

The Resolution Tendencies

Ex. 87

- In all cases, the root resolves downward a diatonic half step to the root of resolution chord.
- The third of the G and F moves downward a diatonic half step to the third of the major triad; or downward a diatonic whole step to the third of the minor triad.

One of the thirds of the T moves downward a diatonic half step to the third of the major triad; or downward a diatonic whole step to the third of the minor triad; and the other third of the T moves upward a diatonic whole step to the fifth of the resolving triad.

- c. The fifth of the G moves downward a diatonic half step to the fifth of the resolving triad.
- d. The augmented fourth of the F repeats and becomes the fifth of the resolving triad; or when the chord is inverted, with the augmented fourth in the bass, this tone may move downward a perfect fifth to the root of the resolving chord.
- e. In all cases, the augmented sixth moves upward a diatonic half step to the root of the resolving triad.

Inversions

Any inversion of the G and F may be used but it should be noted that the second inversion of the resolving triad is generally weak, hence it is better to avoid the second inversion of the G and F augmented chords.

The T can have but one inversion, since it is a three tone chord, and this inversion is seldom effective.

Examples

Ex. 88

Ex. 88 consists of six musical examples labeled a) through f). Each example is a two-voice harmonic progression. The top voice (treble) and bottom voice (bass) are shown on separate staves. The chords are labeled below each example.

- a) Treble staff: G₃, I, G₃, I, F₃, I, T₁, V₁. Bass staff: G₁, V₁, G, IV.
- b) Treble staff: G₁, V₁, G, IV. Bass staff: G₁, V₁, G, IV.
- c) Treble staff: G, V, F₃, I, G, II, T, VI. Bass staff: F₃, I, F₁, I₁.
- d) Treble staff: F₃, I, F₁, I₁. Bass staff: G, II, T, VI.
- e) Treble staff: G₁, V₁, F₁, I₁, F₁, V₁, F₁, V₁, F₁, V₁. Bass staff: F₁, V₁, T, I.
- f) Treble staff: F₁, V₁, T, I. Bass staff: F₁, V₁, T, I.

Choice of Chords

Taste in the use of augmented chords is largely governed by the chord of the resolution.

In selecting augmented chords for a melody without modulation, these chords may be used:

1. When the melody descends a diatonic half step to the root of the resolving chord, any one of the augmented chords may be used. (Ex. 88 - a.)
2. When the melody descends a diatonic half step to the fifth of the resolving chord, the German Sixth may be used. (Ex. 88 - b.)
3. When the melody descends a diatonic half step to the third of the major chord; or when it descends a diatonic whole step to the third of the minor chord, any one of the augmented chords may be used. (Ex. 88 - c.)
4. When the melody repeats, the French Sixth may be used providing that the resolving note becomes the fifth of the resolving chord. (Ex. 88 - d.)
5. When the melody ascends a diatonic half step to the root of the chord, any one of the augmented chords may be used. (Ex. 88 - e.)
6. When the melody ascends a diatonic whole step to the fifth of the resolving chord, the Italian Sixth may be used. (Ex. 88 - f.)

Exercises

B. The augmented chords also resolve to a second inversion of a major and a minor triad, the root of which in each case is the third of the augmented chord.

Ex. 89



Since the second inversion of both major and minor triads is generally weak, except the I₂ in a final cadence or in cadence-effects, this resolution is used only in connection with the I₂. Hence the tendencies of the tones of the augmented chords in the resolution are quite definitely prescribed as follows:

Ex. 90



Harmonize the following cadence-groups:



Exercises



When resolving to a major or minor triad the root of which is the third of the augmented chord, the German and French Sixth may be used in first and second inversions. Since it is a three-tone chord, the Italian Sixth has but one inversion. (The enharmonic notation for the fifth of the German Sixth chord is frequently used, as at a and b below).

Ex. 91

In these inversions, with these resolutions, any of the chords listed under (A) above may be used; that is, four in the minor key and six in the major key.

Exercises

①

②

③

④

C. The augmented chords also resolve to a major triad the root of which is a perfect fourth below the root of the augmented chord.
(The resolution to the minor triad is not effective.)

Ex. 92

G F T G F T G F T

Since this resolution is effective only to the major triad, there are but three augmented chords available in the major key. (These resolutions are not effective in the minor key.)

The augmented chords should be used in fundamental position for this resolution.

Ex. 93

G F I T I I G F IV T IV IV G F V T V V

Exercises

(1)

(2)

(3)

(4)

Resumé

Each augmented chord then has five resolutions as follows:

Ex. 94

The musical example consists of three staves of music. The top staff is in G major (one sharp), the middle in F major (no sharps or flats), and the bottom in T (one sharp). Each staff contains three augmented chords: G major (two sharps), F major (no sharps or flats), and T (one sharp). The chords are resolved in different ways across the staves.

Since no more than two resolutions are in the same key, the augmented chords serve a useful purpose in modulation.

Modulations

Ex. 95

The musical example shows three staves of music. The top staff is in G major (one sharp). The middle staff is in C major (no sharps or flats). The bottom staff is in G major (one sharp). The first measure shows a resolution to the dominant chord (D major). The second measure shows a resolution to the subdominant chord (A major). The third measure shows a resolution to the supertonic chord (B major).

The musical example shows three staves of music. The top staff is in G major (one sharp). The middle staff is in C major (no sharps or flats). The bottom staff is in G major (one sharp). The first measure shows a resolution to the submediant chord (E major). The second measure shows a resolution to the mediant chord (C major). The third measure shows a resolution to the submediant chord (E major) in a half cadence.

The musical example shows three staves of music. The top staff is in G major (one sharp). The middle staff is in C major (no sharps or flats). The bottom staff is in G major (one sharp). The first measure shows a resolution to the mediant chord (C major). The second measure shows a resolution to the supertonic chord (B major). The third measure shows a resolution to an unrelated key (F major).

Exercises



Formulas

1. The French Sixth Chord is effective when the soprano ascends melodically over the major third and augmented fourth of the chord or descends over those tones. Another voice will pass over the same tones in contrary motion to the soprano.

There are five resolution chords as follows:

Ex. 96

A. 1 2 3 4 5 1 2 3 4 5 B. 1 2 3 4 5 1 2 3 4 5

C. 1 2 3 4 5 1 2 3 4 5 D. 1 2 3 4 5 1 2 3 4 5

E. 1 2 3 4 5 1 2 3 4 5 F. 1 2 3 4 5 1 2 3 4 5

Complete the resolutions in Example. 96 - B, C, D, E, F, above.

In Example 96 - A, the first resolution chord (Chord 1) may be a VI in the key of C major; a II in G major; a III in F major; a I in a minor; a IV in e minor. The following passages illustrate cadences in those keys:

Ex. 97

VI II

III I IV

In Ex. 96 - A, chord 2 may be a I in A major; a V in D major; a IV in E major; a V in d minor.

Chord 3 is a I₂ in d minor.

Chord 4 is a I₂ in D major.

Chord 5 may be a I in F major; a V in B_b major; a IV in C major; a V in b_b minor.

In similar manner, analyze the resolution chords in Examples B, C, D, E, F, and play cadences in the various keys as illustrated above.

Exercises

(1)

(2)

(3)

(4)

2. The German Sixth chord may be used effectively between (1) either a V^7 , a VII^7 , or a II^7 , and (2) a I.

Ex. 98

a) a. b. c. b) c)

V_1^7 VII_1^7 II_3^7 G I V_2^7 VII_1^7 II^7 G I_1 V_3^7 VII_2^7 II_1^7 G I_2

The progression (2 - 3 \flat - 3 \natural) of the scale in Example 1 is often altered to (2 - 2 \sharp - 3) as given in Example 2 and 3.

This formula is also effective when reversed, that is when played backward.

In that case, the scale progression (5 - 6 \flat - 6 \natural) is often altered to (5 - 5 \sharp - 6).

Exercises

(1)

(2)

(3)

(4)

Chapter XVII

THE NEAPOLITAN SIXTH CHORD

The Neapolitan Sixth Chord (N) is the first inversion of a major triad, the root of which is $\flat 2$ of the scale. It is used more frequently in the minor key, but it may be used also in the major key.

In the major key, the chord is frequently used with the third doubled in the soprano.

The chord resolves to a I_2 . It may also resolve directly to a V^7 . A German or French Sixth chord is frequently used between the Neapolitan Sixth and the I_2 .

Ex. 99

N I₂ N I₂ N V⁷ V⁷₃ N G I₂ N I₂ N I₂ N I₂ N V⁷ V⁷₃ N F I₂

Exercises

(1)

(2)

(3)

(4)



UNIVERSAL
LIBRARY



112 636

UNIVERSAL
LIBRARY